

In the Claims

1. (Currently amended) A method of preparing and selecting monoclonal antibodies for a specific antigen, the method comprising:
preparing a coding vector comprising a nucleotide sequence encoding an antibody binding protein, wherein the antibody binding protein binds an antibody and presents it on the cell surface of a hybridoma cell;
inserting the coding vector in a myeloma cell;
culturing the myeloma cell for expression of the antibody binding protein on the myeloma cell;
selecting active myeloma cells that express the antibody binding protein;
fusing B lymphocytes with the active myeloma cells to form hybridoma cells, wherein the B lymphocytes generate an anti-specific antigen antibody in response to the exposure to the specific antigen;
culturing the hybridoma cells under suitable conditions for expressing anti-specific antigen antibodies and antibody binding proteins on the surface of the hybridoma cell;
detecting the expressing hybridoma cells by a labeled specific antigen; and
selecting a hybridoma cell expressing the monoclonal antibody.
~~the fusion of B lymphocytes with myeloma cells to form antibody-producing hybridoma cells, the antibodies being presented on the cell surface of the hybridoma cells by means of an antibody binding protein, and the binding of the antibodies to antigens, wherein the antibody binding proteins are inserted in the hybridoma cells via the myeloma cells or in the hybridoma cells via the expression vectors coding therefor.~~
2. (Currently amended) The method according to claim 1, wherein the antibody binding protein comprises a signal peptide, an antibody binding site independent of the anti-antigen antibody specificity and a membrane anchor.
3. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises an Fc binding protein or portions thereof.
4. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises a combination of Fc binding proteins or portions thereof.

5. (Previously presented) The method according to claim 4, wherein the Fc binding protein is selected from the group consisting of CD16, CD32 and CD64.
6. (Previously presented) The method according to claim 2, wherein the antibody binding protein comprises an antibody binding domain of proteins selected from the group consisting of A, G, L and LG.
7. (Currently amended) The method according to claim 2, wherein the antibody binding protein comprises a combination of a signal peptide selected from the group consisting of a signal peptide of a mouse Ig ~~epsilon~~-kappa chain, and a signal peptide of a mouse MHC-class I k(k) molecule; an antibody binding site of a protein selected from the group consisting of protein A, G, L, and LG; and a transmembrane domain selected from the group consisting of PDGFR and CD52.
8. (Previously presented) The method according to claim 7, wherein the antibody binding protein is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4 and SEQ ID NO: 6.
9. (Previously presented) The method according to claim 1, wherein the hybridoma cells (over)express Rag1 and/or Rag2.
10. (Currently amended) The method according to claim 1, wherein the specific antigens originate from an antigen library.
11. (Currently amended) The method according to claim 1, wherein the specific antigens are bound to a carrier.
12. (Previously presented) The method according to claim 11, wherein the carrier comprises magnetobeads.
13. (Currently amended) The method according to claim 7, wherein the specific antigens comprise a fluorescence or biotin labeling.

14. (Currently amended) The method according to claim 13, wherein the fluorescence labeling comprises FITC, TRITC, Cy3, Cy5, Cy5.5, Cy7 ~~and~~ or phycoerythrin.
- 15.-20. (Cancelled)
21. (New) A method of preparing and selecting monoclonal antibodies for a specific antigen, the method comprising:
- a) preparing an expression vector comprising a nucleotide sequence encoding an antibody binding protein, wherein the antibody binding protein comprises a combination of the signal peptide selected from the group consisting of a mouse Ig cappa chain and a mouse MHC-class I k(k) molecule, an antibody binding site of proteins selected from the group consisting of A, G, L and LG and a transmembrane domain selected from the group consisting of PDGFR and CD52.
 - b) inserting the expression vector in a myeloma cell;
 - c) culturing the myeloma cell for expression of the antibody binding protein on the myeloma cell;
 - d) selecting active myeloma cells that express the antibody binding protein;
 - e) exposing B lymphocytes to the specific antigen;
 - f) selecting B lymphocytes that generate an anti-specific antigen antibody in response to the exposure to the specific antigen;
 - g) fusing the selected B lymphocytes with the active myeloma cells to form hybridoma cells;
 - h) culturing the hybridoma cells under suitable conditions for expressing anti-specific antigen antibodies and antibody binding proteins on the surface of the hybridoma cell;
 - i) exposing the expressing hybridoma cells to the specific antigen;
 - j) determining binding of the expressing hybridoma cells to the specific antigen; and
 - k) selecting an expressing hybridoma cell having a predetermined binding affinity to the specific antigen thereby providing an effective hybridoma cell for expressing the monoclonal antibody.
22. (New) The method according to claim 21, wherein the nucleotide sequence encoding the antibody binding protein is selected from the group consisting of SEQ ID NO: 1 from

nucleotide 737-1420, SEQ ID NO: 3 from nucleotide 682-1782, and SEQ ID NO: 5 from nucleotide 682-1431.

23. (New) The method according to claim 21, wherein the antibody binding protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO 4 and SEQ ID NO:6.
24. (New) The method according to claim 21, wherein step (k) comprises sorting by FACS.